

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 08-056839

(43)Date of publication of application : 05.03.1996

(51)Int.Cl.

A47J 27/16

A47J 27/00

(21)Application number : 06-194377

(71)Applicant : ISEKI &amp; CO LTD

(22)Date of filing : 18.08.1994

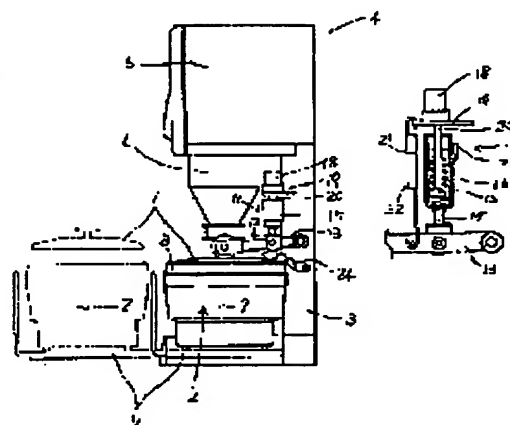
(72)Inventor : FUKUDA YOJI

## (54) RICE COOKER

## (57)Abstract:

PURPOSE: To cook rice with good taste and to make a rice cooker lightweight by elevating the pressure in an inner pot.

CONSTITUTION: This device is a rice cooking device wherein a rice cooker 2 with an inner pot 8 loaded with a lid 1 of the rice cooker is provided movably in the forward and backward directions to a main body frame 3 and a means for pressing the lid of the rice cooker with a press roller which presses the lid 1 of the rice cooker downward when the rice cooker 2 is pushed in and releases the pressing when it is pulled out is provided.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開平8-56839

(43) 公開日 平成8年(1996)3月5日

(51) Int. Cl. °

A47J 27/16

識別記号

C

D

27/00

103

P

F I

審査請求 未請求 請求項の数 1 O L (全5頁)

(21) 出願番号

特願平6-194377

(22) 出願日

平成6年(1994)8月18日

(71) 出願人

000000125

井関農機株式会社

愛媛県松山市馬木町700番地

(72) 発明者

福田 洋二

愛媛県伊予郡砥部町八倉1番地 井関農機

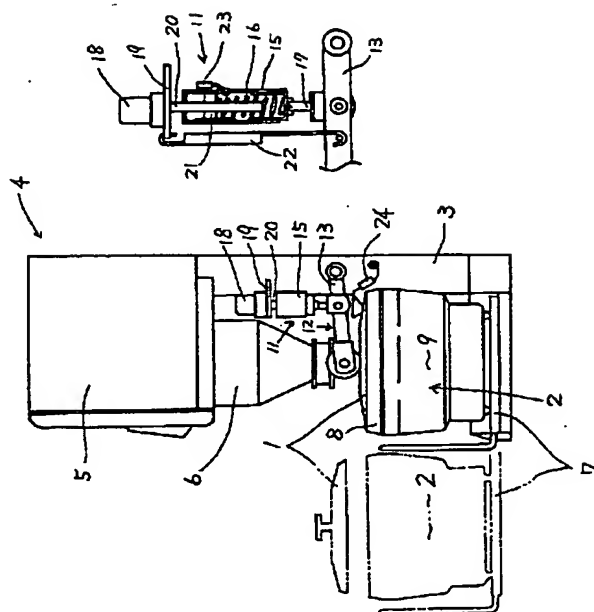
株式会社技術部内

(54) 【発明の名称】炊飯装置

(57) 【要約】

【目的】内釜内の圧力を高め食味のよいご飯に炊き上げると共に炊飯器蓋を軽量化できる。

【構成】炊飯器蓋1をのせた内釜8を有する炊飯器2を本体フレーム3に対して前後方向に移動可能に設け、該炊飯器2を押し込んだとき炊飯器蓋1を下側に向けて加圧し引き出したときに加圧を解除する加圧ローラ14を有する炊飯器蓋加圧手段を備えてなる炊飯装置。



## 【特許請求の範囲】

【請求項 1】 炊飯器蓋 1 を有する炊飯器 2 を本体フレーム 3 に対して移動可能に設け、該炊飯器 2 を押し込んだとき炊飯器蓋 1 を下側に向けて加圧し引き出したときに加圧を解く炊飯器蓋加圧手段を備えてなる炊飯装置。

## 【発明の詳細な説明】

【 0 0 0 1 】

【産業上の利用分野】 この発明は、炊飯釜で炊飯する炊飯装置に関する。

【 0 0 0 2 】

【従来の技術】 炊飯作業においては炊飯器蓋をのせた状態で運搬したり、炊飯器蓋を単独で開閉する回数も多くある。

【 0 0 0 3 】

【この発明が解決しようとする課題】 しかしながら、炊飯器蓋が軽量であると運搬は楽になるが食味の良くないご飯に炊き上がり、重量物にすると婦女子による運搬が難しくなり作業性が悪い。

【 0 0 0 4 】

【課題を解決するための手段】 この発明は、炊飯器蓋を軽量にしながらも食味の良いご飯に炊き上げることができる炊飯装置を提供するものであって、つぎの技術的手段を講じた。すなわち、炊飯器蓋 1 を有する炊飯器 2 を本体フレーム 3 に対して移動可能に設け、該炊飯器 2 を押し込んだとき炊飯器蓋 1 を下側に向けて加圧し引き出したときに加圧を解く炊飯器蓋加圧手段を備えてなる炊飯装置の構成とする。

【 0 0 0 5 】

【作用】 炊飯作業において、米と炊飯用の水を収容した後炊飯器蓋 1 をのせ炊飯器 2 を本体フレーム 3 の所定位置に押し込む。すると、炊飯器蓋加圧手段が炊飯器蓋 1 を下側に向けて加圧する。炊飯作業を終えると、炊飯器 2 を引き出す。すると、炊飯器蓋加圧手段は炊飯器蓋 1 への加圧を解く。

【 0 0 0 6 】

【効果】 食味の良いご飯に炊き上げることができる。そして、炊飯器蓋 1 を軽量化できるので、炊飯器 2 の運搬が楽になる。また、炊飯器蓋 1 に対して自動的に加圧できる。

【 0 0 0 7 】

【実施例】 以下、この発明の実施例を図面に基づいて説明する。まず、その構成について説明すると、洗米炊飯装置 4 は本体フレーム 3 の上側から下側に向って貯米庫 5、洗米タンク 6、炊飯器 2 を順に備えており、貯米庫から供給した米を洗米タンク 6 で洗浄し炊飯器 2 で炊飯する構成である。

【 0 0 0 8 】 炊飯器 2 は本体フレーム 3 の下部に移動可能に設けた引き出し台 7 にのせており、炊飯器蓋 1、内釜 8 を収納する外釜 9 等を備えている。なお、外釜 9 に内釜 8 を加熱する加熱具（ガス、電熱等）を設けてい

る。炊飯器蓋加圧手段はモータ 10、スプリングユニット 11、加圧具 12 等を備えている。加圧具 12 は基部を本体フレーム 3 に上下方向に回転可能に枢着したアーム 13 の先端部に加圧ローラ 14 を設けて構成している。なお、該加圧具 12 は洗米炊飯装置 4 の正面視において炊飯器蓋 1 の左右両端部に配設している。スプリングユニット 11 はスプリングケース 15 に圧縮スプリング 16 を内装し且つ前記アーム 13 の中間部に枢着した押引き杆 17 に着脱自在に取り付けている。モータ 18 は正逆転可能に設けており本体フレーム 3 に固定したモータ受板 19 に着脱自在に取り付けている。

【 0 0 0 9 】 モータ 18 の駆動により回転するモータ軸 20 は前記スプリングケース 15 を貫通して圧縮スプリング 16 の内部まで延設し、圧縮スプリング 16 の上面に接触する押し金具 21 を取り付けしている。22 は一端部をモータ受板 19 に取り付け他端部をアーム 13 に取り付けしている引張りスプリングである。23 はモータ停止センサーであってスプリングケース 15 に着脱自在で位置変更可能に設けており、押し金具 21 が移動しセンサー 23 の位置に到達するとモータ 18 の駆動を停止する構成である。従って、センサー 23 の位置を変更することによりアーム 13 の上下位置を調節でき加圧ローラ 14 による炊飯器蓋 1 への加圧力を変更することができる。

【 0 0 1 0 】 24 は本体フレーム 3 に着脱自在で且つ前後及び上下方向に位置変更自在に設けた蓋感知センサーである。つぎに、その作用について説明すると、計量・洗米・水加減・浸漬の各作業を行うと、洗米タンク 6 から米と炊飯用の水が排出され下方に位置する炊飯器 2 の内釜 8 に回収される。つづいて、作業者は引き出し台 7 を手前側に引き出して炊飯器蓋 1 を内釜 8 にのせてから引き出し台 7 を元の位置まで押し込む。そして、該炊飯器蓋 1 が蓋感知センサー 24 に当たると、蓋感知センサー 24 は蓋有りと感知し信号を出力する。

【 0 0 1 1 】 すると、この信号によりモータ 18 は駆動してモータ軸 20 を回転するので、押し金具 21 は圧縮スプリング 16 を押しながら下方に向けモータ軸 20 の軸芯方向に移動する。そして、該押し金具 21 がモータ停止センサー 23 のある位置に到達したときモータ 18 の駆動を停止する。すると、スプリングケース 15 と押引き杆 17 は圧縮スプリング 16 によって下方に移動するので、アーム 13 は引張りスプリング 22 を引張りながら枢支部を中心にして下側に向けて回転する。従って、アーム 13 の先端部に設けた加圧ローラ 14 も下側に向けて移動し炊飯器蓋 8 を下側に加圧する。

【 0 0 1 2 】 つぎに、作業者（全自動の場合はマイコンからの出力信号により）は点火スイッチを「ON」にし炊飯作業を開始する。所定時間後蒸らし作業を終えると炊飯が完了する。つづいて、モータ 18 が逆転すると、モータ軸 20 も逆転するので押し金具 21 は上昇して圧

10

20

30

40

50

縮スプリング 1 6 への押圧を緩める。これに関連して、引張りスプリング 2 2 はアーム 1 3 を引張り上げるので、スプリングケース 1 5 と押引き杆 1 7 も上昇して元の位置に戻る。従って、加圧ローラ 1 4 は上側に移動し炊飯器蓋 1 への加圧を解除する。

【0 0 1 3】作業者は引き出し台 7 を引き出しご飯を収容した内釜 8 を取り出して次の工程の所まで運搬する。このように、炊飯器蓋加圧手段により炊飯器蓋 1 への加圧・解除を自動的にに行い得る。また、炊飯器蓋 1 を軽量化できるので、炊飯器蓋 1 自体の移動、ご飯を収容し且つ炊飯器蓋 1 をのせている内釜 8 の運搬が楽になる。そして、内釜内の圧を高め得るので食味の良いご飯に炊き上げることができる。

【0 0 1 4】なお、炊飯器蓋 1 の感知によりモーター 1 8 を駆動し加圧する構成としたが、予め加圧ローラ 1 4 を加圧する位置にモーターを駆動して位置しておく構成としてもよい。図 4 は国産米と輸入米とを混合して炊飯する手段に関するもので、洗浄後の国産米量及び国産水量に適する水量と輸入米量に適する水量を合せた水加減として炊飯用の水を内釜 8 に排出する。また、別に長時間浸漬し水切り（ざるあげ）した輸入米を内釜 8 に供給する。そして、内釜 8 に炊飯器蓋 1 を被せ炊飯作業を行う。これにより、浸漬時間が異なる異種の米の炊飯時間をほぼ同一にでき食味の低下を防止し得る。

【0 0 1 5】図 5 はご飯を取り出した後の釜（内釜）の洗浄装置 2 5 に関するものであって、周囲を囲ったケース 2 8 の取付板 2 7 に約 4 5 度の角度を有するホルダーケース 2 6 を着脱自在に取り付けている。そして、該ホルダーケース 2 6 に内釜 8 の開口部側を嵌め合せている。2 9 は回転可能に軸支した回転軸 3 0 の先端部に着脱自在に取り付けた水案内管であって、一端部をホルダーケース 2 6 の底壁角部に接近し他端部をホルダーケース 2 6 にセットした内釜 8 の底壁角部に接近する長さに設けていると共に軸芯方向に所定間隔置きにノズル 3 1 を設けている。

【0 0 1 6】そして、前記回転軸 3 0 は中空形状として水案内管 2 9 に連通し、基部には取付板 2 7 に取り付けられたモータ取付板 3 1 に取り付けられているモータ 3 2 のモ-

タ軸 3 3 に固定したギヤ 3 4 と噛み合うギヤ 3 5 を固定している。3 6 は切替バルブ 3 7 を有する給水管であって、前記回転軸 3 0 と連通している。3 8 は加熱ユニットであって、切替バルブ 3 7 と回転軸側の給水管 3 6 に接続している。3 9 は取付板 2 7 の下端部で形成した排水漏斗 4 0 と連通している排水管である。なお、ケース 2 8 の前壁は開閉蓋 4 1 により開閉する構成である。

【0 0 1 7】図 5 の構成の洗浄装置 2 5 の作用について説明すると、まず、開閉蓋 4 1 を開け内釜 8 をホルダーケース 2 6 に嵌め合せる。そして、開閉蓋 4 1 を閉じてからモータ 3 2 を駆動すると共に給水管 3 6 に水を送り込む。するとギヤ 3 4 と噛み合うギヤ 3 5 は回転するので、回転軸 3 0 及び水案内管 2 9 を同方向に回転する。そして、切替バルブ 3 7 ・給水管 3 6 ・回転軸 3 0 ・水案内管 2 9 を通ってきた水はノズル 3 1 から内釜 8 の内壁に向って噴射し内壁を洗浄すると共に付着したご飯を洗い流す。この汚水やご飯はホルダーケース 2 6 から排出漏斗 4 0 ・排水管 3 9 を通って所定の場所に排出される。

【0 0 1 8】なお、本洗浄あるいはご飯やネバが落ちにくいときは、切替バルブ 3 7 を切替えて水を加熱ユニット 3 8 に送り込む。すると、この加熱ユニット 3 8 により約 6 0℃に加熱された温水は給水管等を通してノズル 3 1 から噴き出すので洗浄及び落し効果を高め得る。そして、洗浄を終えると開閉蓋 4 1 を開け内釜 8 を取り出せばよい。このとき、モータ 3 2 及び給水を停止している。

#### 【図面の簡単な説明】

【図 1】洗米炊飯装置の側面図。

【図 2】洗米炊飯装置の正面図。

【図 3】作業のフロー図。

【図 4】国産米と輸入米を供給した内釜の断面図。

【図 5】釜洗浄装置の側断面図。

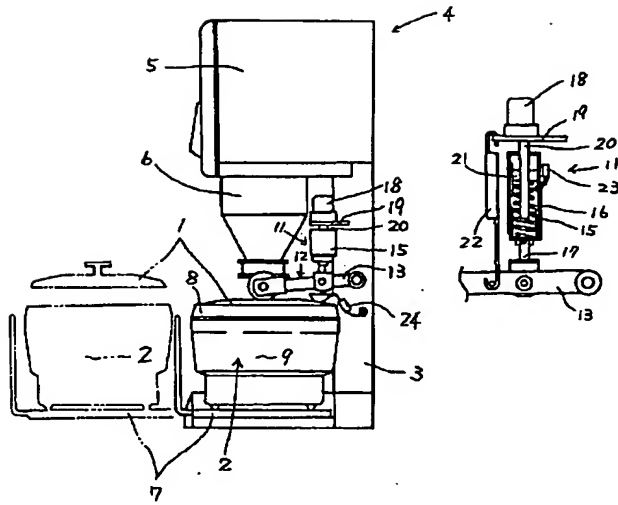
#### 【符号の説明】

- 1 炊飯器蓋
- 2 炊飯器
- 3 本体フレーム

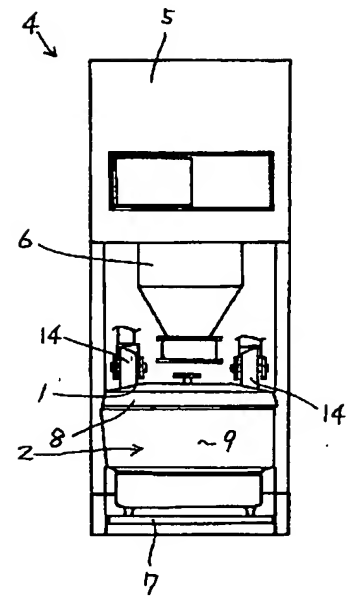
【図 4】



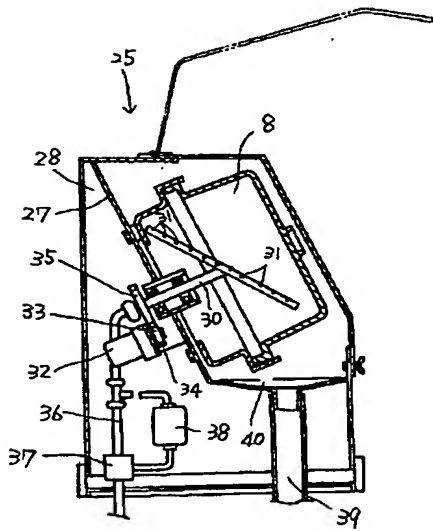
【図 1】



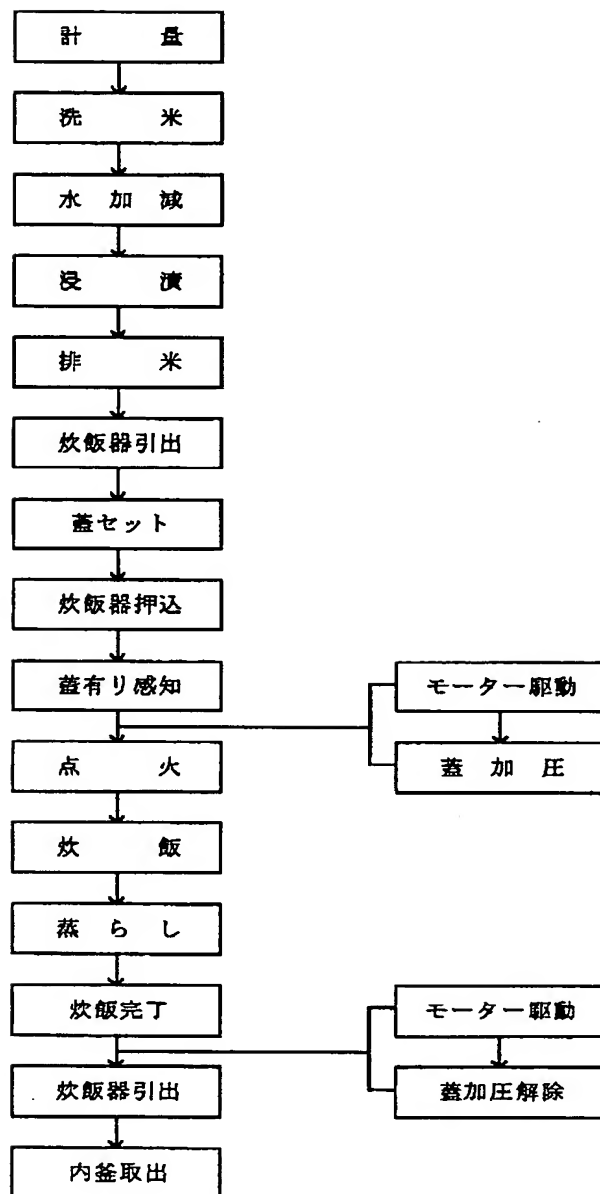
【図 2】



【図 5】



【図 3】



# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 08-056839

(43)Date of publication of application : 05.03.1996

(51)Int.Cl.

A47J 27/16  
A47J 27/00

(21)Application number : 06-194377

(71)Applicant : ISEKI & CO LTD

(22)Date of filing : 18.08.1994

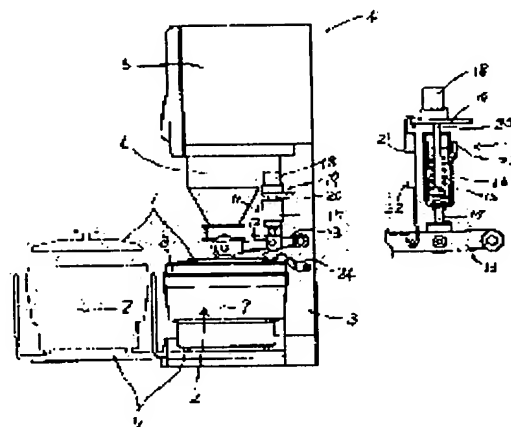
(72)Inventor : FUKUDA YOJI

## (54) RICE COOKER

### (57)Abstract:

**PURPOSE:** To cook rice with good taste and to make a rice cooker lightweight by elevating the pressure in an inner pot.

**CONSTITUTION:** This device is a rice cooking device wherein a rice cooker 2 with an inner pot 8 loaded with a lid 1 of the rice cooker is provided movably in the forward and backward directions to a main body frame 3 and a means for pressing the lid of the rice cooker with a press roller which presses the lid 1 of the rice cooker downward when the rice cooker 2 is pushed in and releases the pressing when it is pulled out is provided.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

**\* NOTICES \***

**JPO and NCIPI are not responsible for any damages caused by the use of this translation.**

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

**CLAIMS**

---

[Claim(s)]

[Claim 1] Cooking-rice equipment which comes to have a rice cooker lid pressurization means to solve pressurization when the rice cooker lid 1 is turned to the bottom, and it pressurizes when the rice cooker 2 which has the rice cooker lid 1 is formed movable to the body frame 3 and this rice cooker 2 is pushed in, and it pulls out.

---

[Translation done.]



## \* NOTICES \*

JPO and NCIPi are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

## DETAILED DESCRIPTION

---

### [Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the cooking-rice equipment which carries out cooking rice by the cooking-rice iron pot.

[0002]

[Description of the Prior Art] Where a rice cooker lid is carried in a cooking-rice activity, it carries, or there are also many counts which open and close a rice cooker lid independently.

[0003]

[This Object of the Invention] However, although conveyance becomes it easy that a rice cooker lid is lightweight, when it is steamed in the boiled rice which is not good as for a flavor and is made a heavy lift, conveyance by the women child becomes difficult and workability is bad.

[0004]

[Means for Solving the Problem] This invention offers the cooking-rice equipment which can be steamed completely in the good boiled rice of a flavor, though it is covered lightweight with a rice cooker lid, and it provided the following technical means. That is, the rice cooker 2 which has the rice cooker lid 1 is formed movable to the body frame 3, and when the rice cooker lid 1 is turned to the bottom, and it pressurizes, when this rice cooker 2 is pushed in, and it pulls out, it considers as the configuration of the cooking-rice equipment which comes to have a rice cooker lid pressurization means to solve pressurization.

[0005]

[Function] In a cooking-rice activity, after holding rice and the water for cooking rice, the rice cooker lid 1 is carried and a rice cooker 2 is stuffed into the predetermined location of the body frame 3. Then, a rice cooker lid pressurization means turns the rice cooker lid 1 to the bottom, and pressurizes it. After finishing a cooking-rice activity, a rice cooker 2 is pulled out. Then, a rice cooker lid pressurization means solves the pressurization to the rice cooker lid 1.

[0006]

[Effect] It can steam completely in the good boiled rice of a flavor. And since-izing of the rice cooker lid 1 can be carried out [ lightweight ], conveyance of a rice cooker 2 becomes easy. Moreover, it can pressurize automatically to the rice cooker lid 1.

[0007]

[Example] Hereafter, the example of this invention is explained based on a drawing. First, when the configuration is explained, rice-cleaning cooking-rice equipment 4 is a configuration which is equipped with \*\*\*\*\* 5, the rice-cleaning tank 6, and the rice cooker 2 in order toward the bottom from the body frame 3 bottom, washes the rice supplied from \*\*\*\*\* by the rice-cleaning tank 6, and carries out cooking rice with a rice cooker 2.

[0008] The rice cooker 2 equips the lower part of the body frame 3 with the outside iron pot which pulled out, has put on base 7 and contains rice cooker lid 1 and inner kettle 8 9 grade prepared movable. In addition, the heating implements (gas, electric heat, etc.) which heat an inner kettle 8 in the outside iron pot 9 are formed. The rice cooker lid pressurization means is equipped with the motor 10, the spring unit 11, and the pressurization implement 12 grade. The pressurization implement 12 forms and constitutes the pressurization roller 14 in the point of the arm 13 which pivoted the base in the body frame 3 rotatable in the vertical direction. In addition, this pressurization implement 12 is arranged in the right-and-left both ends of the rice

cooker lid 1 in the front view of rice-cleaning cooking-rice equipment 4. The spring unit 11 is attached in push-pull \*\*\*\* 17 which carried out the interior of the compression spring 16 to SUPURINGUKE-SU 15, and was pivoted in the pars intermedia of said arm 13 free [ attachment and detachment ]. The motor side 18 is attached in the motor-side supporting plate 19 which has formed possible [ a forward inversion ] and was fixed to the body frame 3 free [ attachment and detachment ].

[0009] The motor shaft 20 which rotates by the drive of a motor 18 penetrated said SUPURINGUKE-SU 15, and installed it to the interior of a compression spring 16, and the push metallic ornaments 21 in contact with the top face of a compression spring 16 are attached. 22 is a tension spring which attached the end section in the motor-side supporting plate 19, and has attached the other end in the arm 13. 23 is a motor halt sensor, and when it has prepared that it can detach and attach freely to SUPURINGUKE-SU 15, and possible [ repositioning ], the push metallic ornaments 21 move and it arrives at the location of a sensor 23, it is the configuration of stopping the drive of a motor side 18. Therefore, by changing the location of a sensor 23, the vertical location of an arm 13 can be adjusted and the welding pressure to the rice cooker lid 1 with the pressurization roller 14 can be changed.

[0010] 24 is the lid sensing sensor formed can detach and attach freely to the body frame 3, and free [ repositioning in order and the vertical direction ]. It will be collected from the rice-cleaning tank 6 by the inner kettle 8 of the rice cooker 2 which rice and the water for cooking rice are discharged and is located caudad, if the operation is explained and each activity of measuring, rice cleaning, the amount of water, and immersion will next be done. Continuing, an operator pulls out the drawer base 7 to a near side, after he puts the rice cooker iron pot 1 on an inner kettle 8, he pulls out, and he pushes in a base 7 to the original location. And if this rice cooker lid 1 hits the lid sensing sensor 24, the lid sensing sensor 24 will be sensed to be it those with a lid, and will output a signal.

[0011] Then, since a motor side 18 drives with this signal and the motor shaft 20 is rotated, pushing a compression spring 16, the push metallic ornaments 21 are turned caudad and move in the direction of an axis of the motor shaft 20. And when these push metallic ornaments 21 arrive at a location with the motor-side halt sensor 23, the drive of a motor side 18 is stopped. Then, since SUPURINGUKE-SU 15 and push-pull \*\*\*\* 17 move caudad with a compression spring 16, an arm 13 rotates the tension spring 22 towards the bottom focusing on the pivotable support section with tension. Therefore, the pressurization roller 14 formed in the point of an arm 13 also moves towards the bottom, and the rice cooker lid 8 is pressurized at the bottom.

[0012] next, an operator turns "ON" an ignition switch with the output signal from a microcomputer case it is full automatic, and starts a cooking-rice activity. Cooking rice is completed, after steaming after predetermined time and finishing an activity. If it continues and a motor 18 is reversed, since the motor shaft 20 will also be reversed, the push metallic ornaments 21 go up and loosen the press to a compression spring 16. Since the tension spring 22 has pulled the arm 13 in relation to this, SUPURINGUKE-SU 15 and push-pull \*\*\*\* 17 also go up, and it returns to the original location. Therefore, the pressurization roller 14 moves to the bottom and cancels the pressurization to the rice cooker lid 1.

[0013] An operator takes out the inner kettle 8 which pulled out the drawer base 7 and held boiled rice, and carries to the place of the following process. Thus, a rice cooker lid pressurization means can perform automatically pressurization and discharge to the rice cooker lid 1. Moreover, since-izing of the rice cooker lid 1 can be carried out [ lightweight ], migration of rice cooker lid 1 the very thing and conveyance of the inner kettle 8 which held boiled rice and has carried the rice cooker lid 1 become easy. And since \*\* in an inner kettle can be raised, it can steam completely in the good boiled rice of a flavor.

[0014] In addition, although considered as the configuration which drives a motor side 18 by sensing of the rice cooker lid 1, and is pressurized, it is good also as a configuration which drives a motor side in the location which pressurizes the pressurization roller 14 beforehand, and is located in it. the thing about the means which drawing 4 mixes domestic rice and imported rice, and carries out cooking rice -- it is -- the amount of domestic U.S. after washing -- and domestic -- the water for cooking rice is discharged to an inner kettle 8 as the amount of water which doubled the amount of water suitable for amount of water, and the amount of water suitable for the amount of imported rice. Moreover, the imported rice from which carried out long duration immersion independently, and it drained off water (colander \*\*\*\*) is supplied to an inner kettle 8. And the rice cooker lid 1 is put on an inner kettle 8, and a cooking-rice activity is done. Cooking-rice time amount of U.S. of a different kind with which immersion time amount differs can be made almost the same

by this, and the fall of a flavor can be prevented.

[0015] Drawing 5 has attached the holder-case 26 where it has the include angle of about 45 degrees in the tie-down plate 27 of the case 28 surrounding a perimeter, free [ attachment and detachment ] about the washing station 25 of the iron pot (inner kettle) after taking out boiled rice. And the opening side of an inner kettle 8 is inserted in this holder-case 26. 29 is water guidance tubing attached in the point of the revolving shaft 30 supported to revolve pivotable free [ attachment and detachment ], and it has formed the nozzle 31 in the direction of an axis every predetermined spacing while having prepared in the die length close to the bottom wall corner of the inner kettle 8 which approached the bottom wall corner of the holder-case 26 in the end section, and set the other end to the holder-case 26.

[0016] And said revolving shaft 30 is open for free passage in the water guidance tubing 29 as a hollow configuration, and is fixing the gear 34 fixed to the motor shaft 33 of the motor 32 attached in the motor tie-down plate 31 attached in the tie-down plate 27, and the gearing gear 35 to a base. 36 is a feed pipe which has the change bulb 37, and is open for free passage with said revolving shaft 30. 38 is a heating unit and is connected to the feed pipe 36 by the side of the change bulb 37 and a revolving shaft. 39 is the wastewater funnel 40 formed in the lower limit section of a tie-down plate 27, and a drain pipe open for free passage. In addition, the front wall of a case 28 is a configuration opened and closed with the closing motion lid 41.

[0017] If an operation of the washing station 25 of the configuration of drawing 5 is explained, first, the closing motion lid 41 will be opened and an inner kettle 8 will be inserted in the holder-case 26. And water is sent into a feed pipe 36 while driving a motor 32, after closing the closing motion lid 41. Then, since a gear 34 and the gearing gear 35 are rotated, a revolving shaft 30 and the water guidance tubing 29 are rotated in this direction. And the water which has passed along change bulb 37, feed pipe 36, revolving-shaft 30, and the water guidance tubing 29 flushes the boiled rice which adhered while injecting toward the wall of an inner kettle 8 from the nozzle 31 and washing the wall. This sanitary sewage and boiled rice are discharged by the predetermined location through discharge funnel 40 and a drain pipe 39 from the holder-case 26.

[0018] In addition, when neither this washing or boiled rice nor NEBA can fall easily, the change bulb 37 is changed and water is sent into the heating unit 38. Then, since the warm water heated by about 60 degrees C by this heating unit 38 blows off from a nozzle 31 through a feed pipe etc., it can heighten washing and the dropping effectiveness. And what is necessary is to open the closing motion lid 41 and just to take out an inner kettle 8, after finishing washing. A motor 32 and water supply are suspended at this time.

---

[Translation done.]

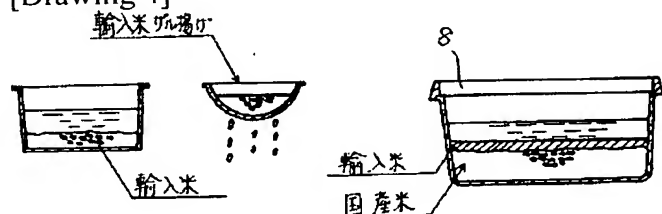
## \* NOTICES \*

JPO and NCIPi are not responsible for any damages caused by the use of this translation.

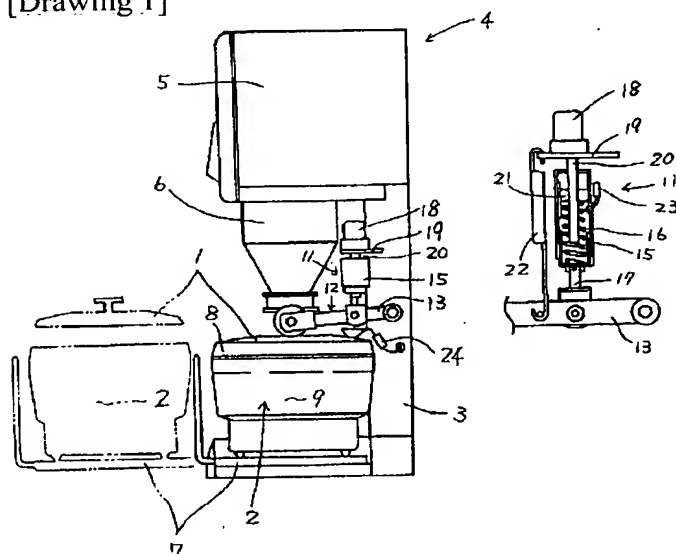
1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

## DRAWINGS

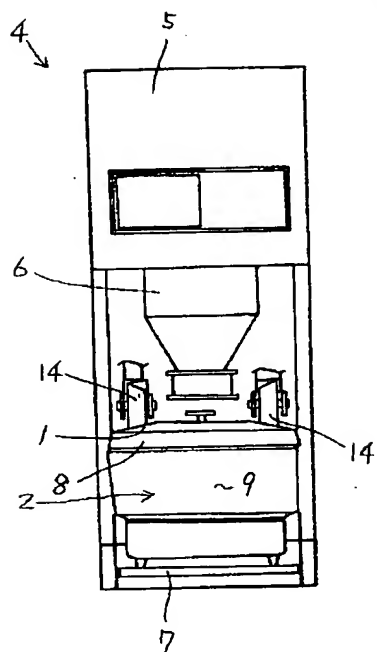
[Drawing 4]



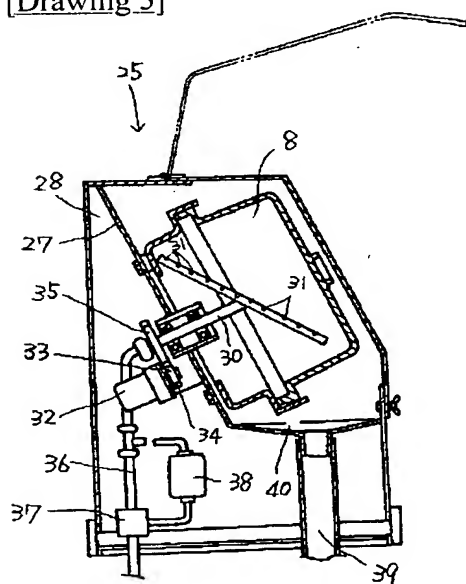
[Drawing 1]



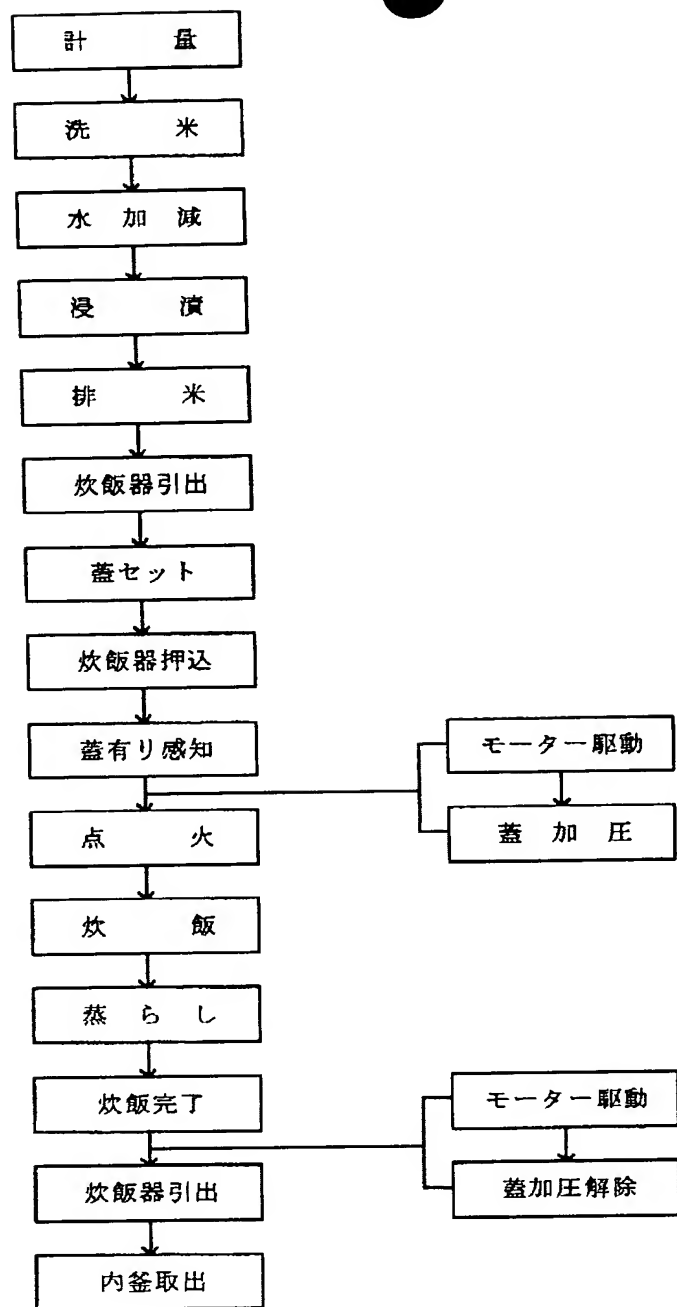
[Drawing 2]



[Drawing 5]



[Drawing 3]



[Translation done.]

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ **BLACK BORDERS**
- ☒ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☒ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☒ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**